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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/615,278	07/08/2003	John Deaver	C0011/7006	1880
64967 7590 04/17/2007 LAW OFFICES OF PAUL E. KUDIRKA 40 BROAD STREET SUITE 300 BOSTON, MA 02109			EXAMINER SHAN, APRIL YING	
			ART UNIT	PAPER NUMBER
			2135	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		04/17/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/615,278		DEAVER ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	April Y. Shan		2135	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 31 January 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4, 6-14, 16-24 and 26-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6, 8, 11-14, 16, 18, 21-24, 26 and 28 is/are rejected.
- 7) ☒ Claim(s) 7, 9-10, 17, 19-20, 27 and 29-30 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Amendment***

1. The Applicant's amendment, filed 31 January 2007, has been received, entered into the record, and respectfully and fully considered.
2. As a result of the amendment, claim 1-4, 6-11, 13-14, 16-21, 23-24 and 26-30 have been amended. Claims 5, 15 and 25 have been canceled. Claims 1-4, 6-14, 16-24 and 26-30 are now presented for examination.
3. Any objections or rejections not repeated below for record are withdrawn due to Applicant's amendment/explanation/cancellation.
4. Applicant's amendments and argument have been fully considered, but are moot in view of new ground rejection as set forth below. It is noted that Applicant's arguments are directed towards limitations newly added via amendments.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

Art Unit: 2135

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 1-4, 6, 8, 11-14, 16, 18, 21-24, 26 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shen et al. (WO/2002/100037) (an English translation is provided by U.S. Pub No. 2004/0236956 and the below rejections are cited from the translated U.S. Publication) and further in view of Bayer et al. (U.S. Patent No. 7,171,567).

As per **claims 1 and 11**, Paragraphs [0193] and [0197] of Shen et al. discloses a method/apparatus ("a decryption key embedded in the content is an excellent method for protecting content by processing the key itself" – e.g. paragraph [0193]):

(a) at the publishing site, encrypting each digital content document with a key to generate encrypted document content (Shen et al., paragraph [0030] and [0031]);

(c) at the publishing site, creating a list of document identifiers and decryption key pairs (Shen et al., "predetermined table" in paragraph [0028] is corresponding to the list in the claim. "The provider has encrypted content and corresponding decryption key" – e.g. paragraph [0217]);

(d) at the publishing site, assembling the encrypted document content for each content document and the key pair list into a distribution archive file (Shen et al., fig. 3 and "...assembling a content stream including the IPMP Tool List flag, then the IPMP Tool List, content ID, and the actual coded content stream"- e.g. claims 1 and 17);

(e) at the publishing site, encrypting the distribution archive file with a scheduled key unique to that distribution archive file and placing the encrypted distribution file on the stream (Shen et al., "encrypting the coded content stream using a data encryption tool or other tool" –e.g. claim 2. Please note claim is part of the disclosure as well);

(f) at the unsecured site, selecting a distribution archive file from the stream (Shen et al. e.g. "the user terminal 2 selects the desired content 1 to hear from the content list" - par. [0226] and "...and enabling a compliant IPMP terminal to select and search based on these formats..." – e.g. claim 4);

(g) at the unsecured site, extracting a scheduled key from the selected distribution archive file in the stream (Shen et al., "a decryption key embedded in the content is an excellent method for protecting content by processing the key itself" – e.g. paragraph [0193]);

(h) at the unsecured site, using the extracted scheduled key to decrypt the next subsequent distribution archive file in the stream following the selected distribution archive file (Shen et al., "Content decoding for authentication ->key extraction ->next authentication decryption using the key extracted in the previous authentication, executable using a looping rule" – e.g. paragraph [0197]) );

(i) removing the encrypted document content and the key pair list from the decrypted distribution archive file and storing them at the unsecured site (Shen et al., e.g. fig. 9, fig. 10 and par. [0217]-[0219]. Please note User terminal corresponds to Applicant's unsecured site); and

(j) selecting the distribution archive file decrypted in step (h) and repeating steps (g), (h), (i) and (j) for each distribution archive file in the stream (Shen et al., "Content decoding for authentication ->key extraction ->next authentication decryption using the key extracted in the previous authentication, executable using a looping rule" – e.g. paragraph [0197]))

Shen et al. further discloses in claims 1 and 16, "a method/an apparatus...for providing and protecting content on the **content provider side**, comprising:...means for **encrypting the coded content stream...means for creating a content ID...relating to the content used in the above steps**" (Please note claim is also part of the disclosure).

Shen et al. does not expressly disclose (b) computing for each document a document identifier that is related to, but cannot be derived solely from, the encrypted content of that document.

Bayer et al. discloses computing for each document a document identifier that is related to, but cannot be derived solely from, the encrypted content of that document (Bayer, col. 9, lines 9-15, combined value of RespondentID, ViewerID, SurveyID, and ContentID).

At the time of the invention, it would have been obvious to a person with ordinary skill in the art to incorporate Bayer et al.'s method of computing for each document a document identifier this is related to, but cannot be derived solely from, the encrypted content of that document into Shen et al.'s method/apparatus.

The motivation of doing so would have been "to provide an improved system for protecting information over the Internet in which a network computer can enable a client computer having received an encrypted content files to be authenticated by the network computer using a plurality of identifiers before the client computer can receive a key to decrypt the content file", as disclosed by Bayer et al. (Bayer et al., col. 2, 29-35)

As per **claims 2 and 12**, Shen et al. - Bayer et al. disclose a method/apparatus as applied in claims 1 and 11. Shen et al. further discloses receiving a scheduled key at the unsecured site to decrypt the first distribution archive file in the stream from the publishing site ("A license key received from the server is sent to the IPMP tool memory" – e.g. paragraph [0163] and "a license should be retrieved from a license server over a secure channel during a non-standard user authentication process" – e.g. paragraph [0159]. Please note a license key is corresponding to a scheduled key in the claim).



As per **claims 3 and 13**, Shen et al. – Bayer et al. disclose a method/apparatus as applied in claims 1 and 11. Shen et al. further discloses wherein step (e) comprises: encrypting, with a scheduled key, a distribution archive file including a scheduled key for the next distribution archive file in the stream and the plurality of encrypted content files (“...protected content by encryption...” – e.g. paragraph [0005] and “the encryption key is encrypted...and inserted to the IPMP information, and is sent to the terminal with the content stream” –e.g. paragraph [0030], paragraph [0031] and fig. 7).

As per **claims 4 and 14**, Shen et al. – Bayer et al. disclose a method/apparatus as applied in claims 1 and 11. Paragraph [0159] in Shen et al.’s reference further discloses encrypting, with a scheduled key, a distribution archive file including the plurality of encrypted content files. Inherently, it teaches a non-encrypted scheduled key for the next distribution archive file by showing the key can be encrypted to achieve even greater security.

As per **claims 6 and 16**, Shen et al. – Bayer et al. disclose a method/apparatus as applied in claims 1 and 11. Shen et al. further discloses generating a new scheduled key, encrypting the new scheduled key and including the encrypted scheduled key in the distribution archive file (paragraph [0030])

As per **claims 8 and 18**, Shen et al. – Bayer et al. disclose a method/apparatus as applied in claims 1 and 17. Shen et al. further discloses wherein step (a) comprises storing an extracted scheduled key in encrypted form (“An encrypted scrambled key is stored in the IPMP elementary stream 325” – e.g. paragraph [0144]).



Art Unit: 2135

As per **claims 21-24, 26 and 28**, Shen et al. – Bayer et al. disclosed the claimed method of steps as applied in claims 1-4, 6 and 8. Therefore, Shen et al. – Bayer et al. disclose the claimed computer program embodied in a computer usable medium for carrying out the method of steps.

***Allowable Subject Matter***

9. Claims 7, 9-10, 17, 19-20, 27 and 29-30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

10. With regards to claims 7, 9-10, 17, 19-20, 27 and 29-30, the cited prior arts fail to teach a document identifier comprises a text string embedded in program code. As a result, the cited prior art fails to anticipate or render obvious the above-cited claims.

***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. (See PTO – 892)

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

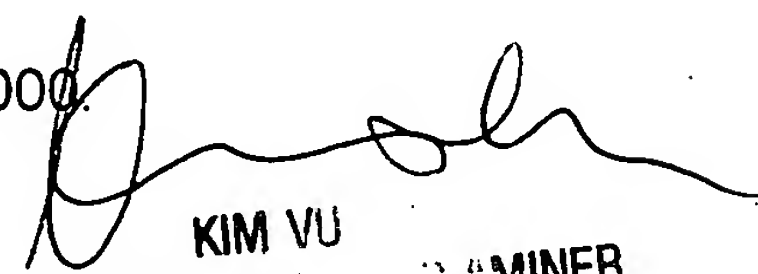
Art Unit: 2135

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to April Y. Shan whose telephone number is (571) 270-1014. The examiner can normally be reached on Monday - Friday, 8:00 a.m. - 5:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Y. Vu can be reached on (571) 272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
KIM VU  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100

AYS  
12 April 2007